

CORPORATE PROFILE  
SPECIAL ADVERTISING SECTION

## "...WORK HARD TO ENSURE OUR CUSTOMERS' CASES MEET OR EXCEED THEIR EXPECTATIONS AND ARE DELIVERED BACK TO THEM ON TIME."



Robin A. Carden  
Vice President of Research & Development, Glidewell Laboratories

Q: How did BruxZir® Solid Zirconia come about and did you expect it to be so popular so quickly?

RC: I was a consultant for Glidewell Laboratories for about four years before I started working full-time in research and development. I had worked with other companies in advanced ceramics, with a focus on zirconia. We started making BruxZir using a patent-pending colloidal process that starts by breaking down the raw zirconia powder mechanically and chemically to make what we call a "milkshake." We then pour that milkshake into discs and use pressure to condense it and vacuum to remove the water. This unique process led to higher density that improved strength and translucency when compared to other monolithic zirconia materials.

We first marketed BruxZir as "More Brawn Than Beauty," focusing on posterior restorations. Since then we have improved the material's translucency, and now dentists are telling us they are using it to replace old PFM bridgework that keeps fracturing. They are also telling us BruxZir is a real game-changer and that it frees up a lot of chairtime. They aren't seeing patients back in the chair saying, "Hey, I've got a cracked crown, can you repair it?" When that happens the dentist is not making any

money. BruxZir is a monolithic product, and a monolithic product moves, meaning, if you crunch ice or drink hot tea, the material moves all as one — a physical phenomenon called thermal expansion. But with PFMs, there are actually three materials that have to move: porcelain, metal and the glaze on top. So you have three materials moving, and they're very weak materials. With BruxZir you have a monolithic material that is very, very strong, so that's what the dentists like. The dentists' response is what surprised us. We knew we had created a whole new level of tooth-colored ceramic that does not break, but the material's popularity was actually unexpected.

Q: What sets this material apart from its competitors?

RC: All of the other competitors use the raw zirconia powder right out of the can. They pick a supplier of zirconia powder and scoop it, then condense it into milling blanks in a dry way. They isostatically or biaxially press the powders together. When you do that, you have to add organic, acrylic-type binders or plasticizers to those powders so they stay together. These binders stay in the milling blanks and that reduces translucency and strength. To produce BruxZir, we use zirconia from Tokyo-based Tosoh Corporation, the world's leading supplier of quality, high-purity zirconia. Our process breaks the zirconia particles down smaller, so we get a finer, denser milling blank that has higher flexural strength and better translucency. In 2010, Tosoh recognized this achievement with BruxZir by presenting Glidewell with the "Best Product Innovation Award" in the Advanced Ceramic category.

Q: How has BruxZir helped revolutionize C&B manufacturing technology?

RC: Because of BruxZir's strength and esthetics and the consistency of digital CAD/CAM systems, you get the same dimensional control on the

contours, margins, contacts and on the occlusal area — and you can control that. Once you have a digital scan file and you can machine that, you get high accuracy. By producing BruxZir with the colloidal system, we get great repeatability. As a quality control measure, we routinely break hundreds of bars in an Instron machine to ensure high flexural strength. Right now we average about 1,312 MPa. We also examine samples of each batch of BruxZir using a spectrophotometer to measure the translucency.

Q: Tell us about working with dentists to educate them and how you help them get in touch with Authorized BruxZir Labs.

RC: Our Director of Clinical Education and Research Dr. Michael DiTolla creates video programs, teaches and gives seminars on what he sees at the chair, and how he works with BruxZir. We also make BruxZir readily available to dentists nationwide through our network of Authorized BruxZir Laboratories. There are many partner labs in the U.S., and dentists can find their nearest Authorized BruxZir Lab by visiting [www.bruxzir.com](http://www.bruxzir.com). These partner labs are listed on our website, and in monthly journal ads and mailers. Dentists should receive an Authentic BruxZir case box decal with every case; otherwise, they are likely getting an imitation BruxZir product as there are many off-brands entering the market. Dentists can always call us to confirm they are getting Authentic BruxZir from an Authorized BruxZir Laboratory.

Q: What makes Glidewell so successful as a company?

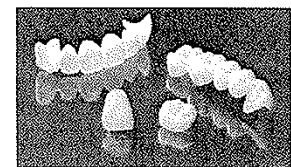
RC: Well, Jim Glidewell has an incredible amount of energy and ideas. When he starts to talk about certain ideas and technologies, he's very much up to date. For example, he has fully embraced the change in dental technology to digital since 2007. In R&D, we have the ability to move quickly because we are a full-service dental laboratory.

I'm able to make use of our crown & bridge department for quick feedback in our dental operator. I'll never fault acts of enthusiasm. Rather than not do it, let's do it! We also have knowledgeable and friendly Customer Support teams that answer our customers' calls live, rather than an automated answering service that just directs calls. Product information and account activity is also available 24-7 via our website, along with free clinical support and educational videos. Also important is our incredible team of experienced technicians, who work hard to ensure our customers' cases meet or exceed their expectations and are delivered back to them on time.



Glidewell Laboratories  
800-854-7256  
[glidewell dental.com](http://glidewell dental.com)

### FEATURED BRANDS



#### BruxZir® Solid Zirconia

BruxZir® Solid Zirconia is a monolithic zirconia restoration with no porcelain overlay. The most prescribed brand of full-contour zirconia, you'll be impressed by the esthetics of BruxZir Solid Zirconia when prescribed instead of metal occlusal PFMs and cast gold restorations. The proprietary production method of the BruxZir zirconia also provides enough translucency to be used in the anterior. For more information, visit [www.bruxzir.com](http://www.bruxzir.com).